

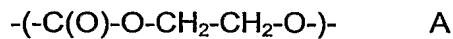
Claims

1. A device comprising a biodegradable polymer which comprises ethylene carbonate units of the formula A
5 $-(\text{C}(\text{O})-\text{O}-\text{CH}_2-\text{CH}_2-\text{O})-$ A
 having an ethylene carbonate content of 70 to 100 Mol%, an intrinsic viscosity of 0.4 to 4.0 dl/g measured in chloroform at 20°C at a concentration of 1 g/dl and a glass transition temperature of from 5 to 50°C, degradable by surface erosion which is governed by a non-hydrolytic mechanism.
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2. The device of claim 1 wherein its surface is coated with the polymer.
3. The device of claim 1 or 2 further comprising a pharmacologically active agent.
- 15 4. The device of claim 3 wherein the pharmacologically active agent is dissolved or dispersed in the polymer.
5. The device of claim 3 or 4 containing an immunosuppressant or antiproliferative agent as pharmacologically active agent.
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6. The device of any preceding claim in form of a stent or catheter.
7. The device of claim 6 in form of a drug-eluting stent.
- 25 8. Use of the device of any preceding claim for the controlled release of a pharmacologically active agent.
9. Use of the device of any one of claims 1 to 7 for treating or preventing neointimal proliferation and thickening, restenosis, vascular occlusion following vascular injury
30 and/or for promoting tissue healing.
10. Method for treating or preventing neointimal proliferation and thickening, restenosis, vascular occlusion following vascular injury and/or for promoting tissue healing in a

human or animal body comprising implanting of a device of any one of claims 1 to 7 into a site where such treatment, prophylaxis or tissue healing is required.

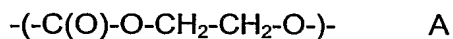
11. A process for the production of a device of any one of claims 1 to 7 comprising coating the device with the ethylene carbonate polymer.

12. Use of a biodegradable polymer, comprising ethylene carbonate units of the formula A



having an ethylene carbonate content of 70 to 100 Mol%, an intrinsic viscosity of 0.4 to 4.0 dl/g measured in chloroform at 20°C at a concentration of 1 g/dl and a glass transition temperature of from 5 to 50°C, degradable by surface erosion which is governed by a non-hydrolytic mechanism for the coating of a device.

13. Use of a biodegradable polymer, comprising ethylene carbonate units of the formula A



having an ethylene carbonate content of 70 to 100 Mol%, an intrinsic viscosity of 0.4 to 4.0 dl/g measured in chloroform at 20°C at a concentration of 1 g/dl and a glass transition temperature of from 5 to 50°C, degradable by surface erosion which is governed by a non-hydrolytic mechanism for the manufacturing of a device for treating or preventing neointimal proliferation and thickening, restenosis, vascular occlusion following vascular injury and/or for promoting tissue healing.